# **Port Tester**

## User's Manual

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#### **FCC Warning**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no promise that interference will not happen in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by any of the following measures:

- · Reorient or move the receiving antenna.
- Increase the distance between the equipment and receiver.
- Connect the equipment to an outlet that is on a separate circuit from the one which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

#### **CE Declaration of Conformance**

This is to certify that the Port Tester is shielded against the generation of radio interference in accordance with the application of Council Directive 89/339/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. Conformity is declared by the application of EN50081/EN50082:1992 Class B.

#### **Trademarks**

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#### Introduction

The Port Tester is a palm-sized unit that is useful for verifying the functionality of the ports on your Ethernet hubs and Network Interface Cards.

The tester offers easy operation. Simply push a button and the Port Tester's LEDs indicate whether the port being tested is functioning correctly. When the test is complete, the unit goes off automatically to save power.

Now you can verify the port connections of your LAN devices without having to hire a specialist! The Port Tester provides instant feedback on whether the connections from your networking devices are capable of conducting N-Way (Auto-Negotiation), or at 10BASE-T/100BASE-TX, with Half/Full Duplex,

The Port Tester is the fastest, easiest, and most cost-effective way to detect network equipment problems as they occur.

## Chapter 1 - General Features

#### General Features of the Port Tester

 Two types of connector for testing today's most popular networking devices:

Hub

for testing protocols and duplexities of Ethernet and Fast Ethernet ports

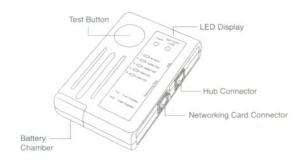
on hubs and switches.

NIC

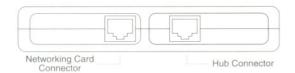
for testing protocols and duplexities of Ethernet and Fast Ethernet ports on Network Interface Cards.

- Simple operation
- · Battery powered
- Automatic de-activation for power saving.
- · Battery condition indicator.

#### LED Display



#### Jack Panel



## Chapter 2 - Getting Started

## Operating Instructions

To test the ports on network devices (hubs, switches, and network interface cards):

- Connect the end of an Ethernet cable to the Port Tester's corresponding connector. Connect the other end of this cable to the port of the networking device you will be testing.
- 2. Press and hold the test button.
- Read the results when the LEDs stop flashing. (See Chapter 3 for more information on reading the LED results.)

#### Application

Who can benefit from the Port Tester?

- Network cabling systems installers
- Network debugging technicians
- Network device manufacturers

## Chapter 3 - How To Read The Results

### The LED Display:

BATTERY **PWR** LOW 1 N-WAY 2 - 100M F/D 3 - 100M H/D 4 - 10M F/D 5 - 10M H/D F/D : Full Duplex H/D : Half Duplex

PWR (Green)

On: Tester is operating normally
Off: Tester is in energy-saving mode

Battery Low (Yellow)

On: Battery is Low. Replace the battery

N-Way (Green)

On: Auto Negotiation is detected

Off: Auto Negotiation is not available

100BASE-TX Full Duplex (Green)

On: Fast Ethernet with Full Duplex detected

Off: Full Duplex is not functioning correctly

or not available

100BASE-TX Half Duplex (Green)

On: Fast Ethernet with Half Duplex detected

Off: Half Duplex is not functioning correctly

or not available

10BASE-T Full Duplex (Green)

On: Ethernet with Full Duplex detected

Off: Full Duplex is not functioning correctly

or not available

10BASE-T Half Duplex (Green)

On: Ethernet with Half Duplex detected

Off: Half Duplex is not functioning correctly

or not available

## Appendix A

#### UTP Color Code

Pair 1 White-Blue (W-BL) Blue (BL)

Blue (BL)

Pair 2 White-Orange (W-O)

Orange (O)

Pair 3 White-Green (W-G)

Green (G)

Pair 4 White-Brown (W-BR)

Brown (BR)

#### Wiring Scheme

T568A			T568B	
1	W-G		1	W-O
2	G		2	0
3	W-O		3	W-G
4	BL		4	BL
5	W-BL		5	W-BL
6	0		6	G
7	W-BR		7	W-BR
8	BR		8	BR

## Specifications

#### Protocols:

• IEEE 802.3 10BASE-T Ethernet

• IEEE 802.3u 100BASE-TX Fast Ethernet

#### Indicators:

PWR
Battery Low
N-Way
100M/FD
100M/FD
100M/FD
100M/FD
100M/FD
100M/FD
10M/FD
10M/FD
10M/FD
10M/FD
10M/HD
<l

#### Connectors:

• RJ-45 x 2 Hub / Network Interface Card

Cable length: Maximum 100m for all connectors

Power: 9-Volt Alkaline Battery

Size: 145 x 86 x 26 mm

5.708 x 3.386 x 1.024 inch

Weight: 185 g / 6.53 oz